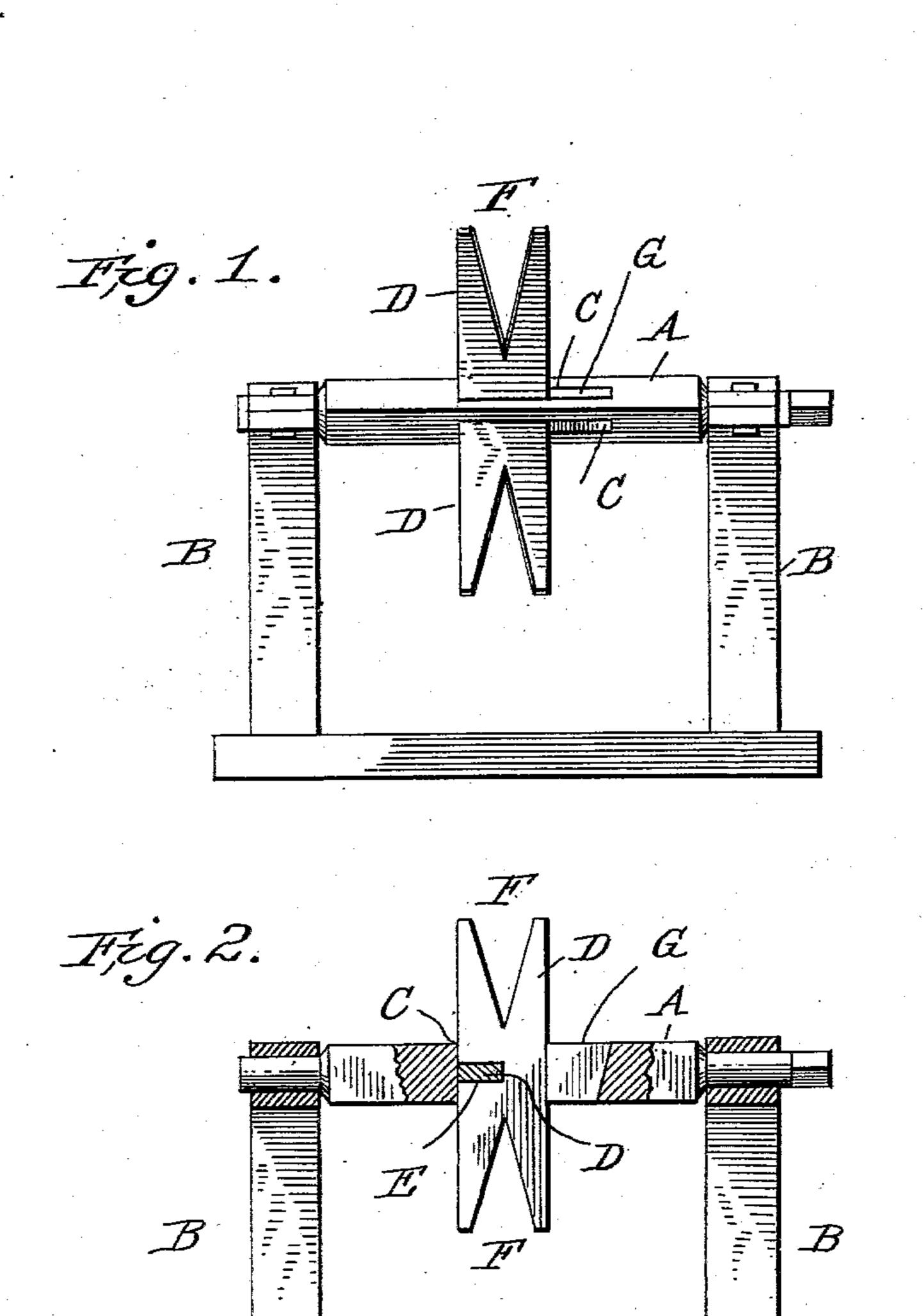
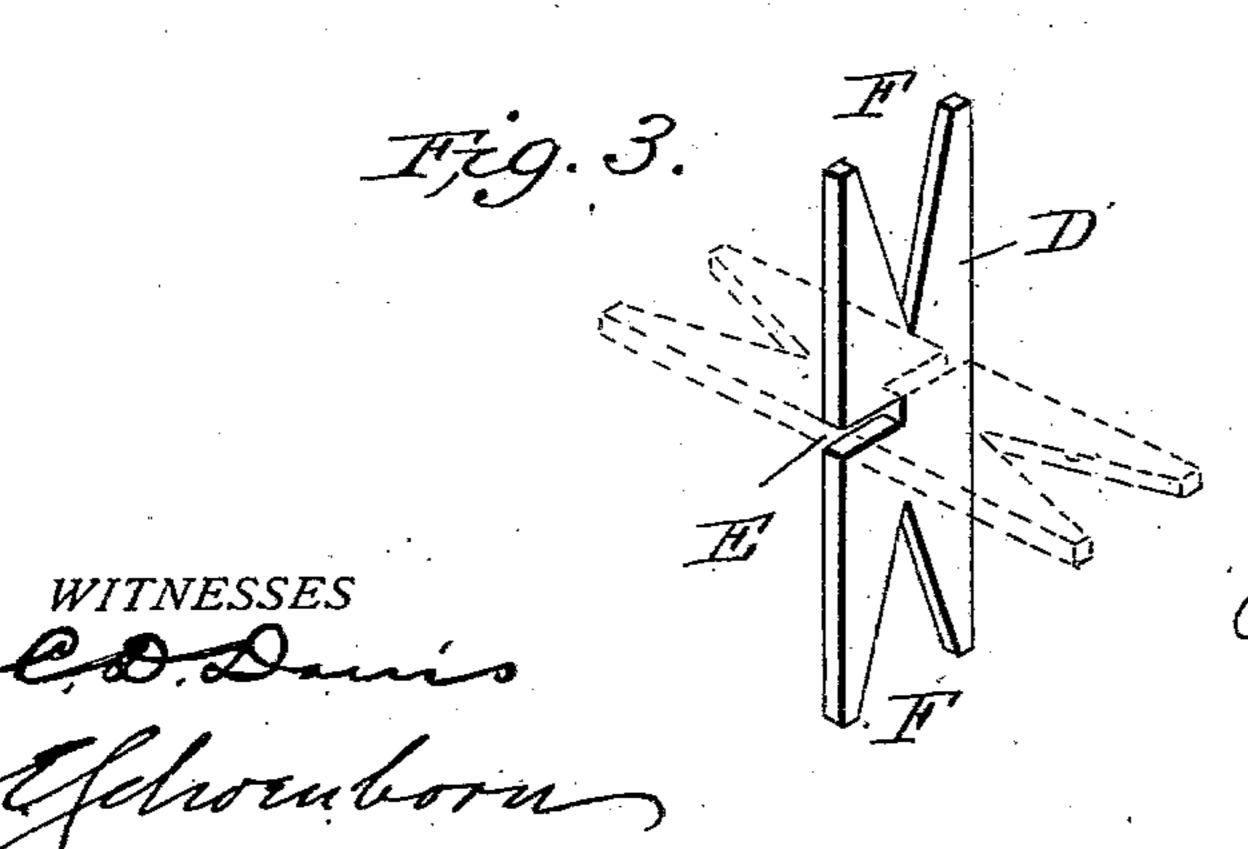
J. O. TOOLE. WINDLASS.

APPLICATION FILED AUG. 14, 1903.

NO MODEL.





John OToole INVENTOR Ly R.H. Bishop.

United States Patent Office. -

JOHN O. TOOLE, OF BUTLER, NEVADA.

WINDLASS.

SPECIFICATION forming part of Letters Patent No. 743,774, dated November 10, 1903.

Application filed August 14, 1903. Serial No. 169,476. (No model.)

To all whom it may concern:

Be it known that I, John O. Toole, a citizen of the United States of America, residing at Butler, in the county of Nye and State of Nevada, have invented certain new and useful Improvements in Windlasses, of which the following is such a full, clear, and exact description as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to improvements in windlasses; and it consists in a certain novel construction, as will be hereinafter first fully described and then particularly pointed out

in the claims.

In the drawings annexed, which fully illustrate my invention, Figure 1 is an elevation of a windlass embodying the improvements.

Fig. 2 is a longitudinal section of the windlass, taken just in advance of the vertical rope-carrying arm, the device being shown as having been given one-eighth of a turn from the position shown in Fig. 1; and Fig. 3 is a detail view of the radial rope-carrying arms.

The shaft A is provided with suitable journals at its ends, by means of which it is mounted in the usual supporting-frame B. At its 30 center the shaft is provided with two intersecting longitudinal slots C, arranged at right angles to each other, and through these slots are inserted the plates D, which constitute the rope-carrying arms. These plates are 35 formed with notches E in one edge, by means of which construction they may be fitted together so as to have no movement on each other. The ends of the plates are formed with V-shaped notches or openings F, which 40 receive the rope in the operation of the device. The plates or rope-carrying arms are inserted through the longitudinal slots C in the shaft and afterward moved laterally together, so that the notch E in one plate will 45 engage the solid body portion of the other plate, thereby preventing the movement of the plates or arms from the slots. After being

thus fitted together the plates or arms are pushed to one end of the slots, so as to be in the center of the shaft, and a fastening device G is then inserted between the end of the slot and the plates, so as to bind the same firmly in place. In the present instance the fastening device is shown as consisting of a wedge-shaped plate or block.

The windlass is operated in the usual manner. The rope is passed over the ends of the rope-carrying arms and fits in the bight of the same, so that the buckets will always be supported from the center of the shaft and 60 will consequently always be in the center of

the well.

The several parts are securely held together without the use of nails or similar fastenings, and they can be readily disassembled for the 65 purpose of repairing or replacing an unsatisfactory part or for shipping or storing.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

1. In a windlass, the combination with the shaft, of interlocking rope-carrying arms mounted in and projecting radially from the shaft.

2. In a windlass, the combination with the 75 shaft provided with intersecting longitudinal slots, of rope-carrying arms inserted through said slots, and means for securing the arms in the slots.

3. In a windlass, the combination with the 8c shaft provided with intersecting longitudinal slots, of rope-carrying arms inserted through said slots and having interlocking notches in their edges, and a wedge inserted through one of the slots between the end of the same 85

and the rope-carrying arms.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

JOHN O. TOOLE.

Witnesses:

W. H. THOMAS, S. J. McCourt.